

I Claim:

1. The insulin analog A0^{Arg}A21^{Gly}B31^{Arg}B32^{Arg}-human insulin.
- 5 2. A composition comprising the insulin analog of claim 1.
3. The composition of claim 2, wherein the composition is a pharmaceutical composition.
- 10 4. The composition of claim 3, further comprising one or more pharmaceutically acceptable excipients.
5. The composition of any one of claims 2-4, further comprising a divalent metal cation.
- 15 6. The composition of claim 5, wherein the divalent metal cation is zinc.
7. The composition of any one of claims 2-6, further comprising a phenolic preservative.
- 20 8. The composition of any one of claims 2-6, further comprising an isotonicity agent.
9. A method of treating hyperglycemia, the method comprising administering
25 the insulin analog of claim 1 to a subject in an amount sufficient to regulate blood glucose concentration in the subject.
10. A method of treating hyperglycemia, the method comprising administering
30 the composition of any one of claims 2-8 to a subject in an amount sufficient to regulate blood glucose concentration in the subject.

11. The method of claim 9 or 10, wherein the subject is treated for diabetes mellitus.

12. The insulin analog A0^{Arg}A21^{Gly}B29^{Arg}B31^{Arg}B32^{Lys}-human insulin.

13. A composition comprising the insulin analog of claim 12.

14. The composition of claim 13, further comprising one or more pharmaceutically acceptable excipients.

15. The composition of any one of claims 12-14, further comprising a divalent metal cation.

16. The composition of claim 15, wherein the divalent metal cation is zinc.

17. A method of treating hyperglycemia, the method comprising administering the composition of any one of claims 12-16 to a subject in an amount sufficient to regulate blood glucose concentration in the subject.

18. Proinsulin analog A21^{Gly}B0^{Lys}B29^{Arg}B32^{Lys}-human proinsulin.

19. A composition comprising the proinsulin analog of claim 18.

20. Proinsulin analog A21^{Gly}B29^{Arg}B32^{Lys}-human proinsulin.

21. A composition comprising the proinsulin analog of claim 20.